IN THE CLAIMS

Please amend the claims as follows:

1.(original) An optical diffraction element comprising a diffraction layer which is divided in diffraction strips alternating with intermediate strips, characterized in that the diffraction strips comprise nano-element tubes which are embedded in the diffraction layer and all have their symmetry axes aligned in one direction.

2. (original) An optical diffraction element as claimed in claim 1, characterized in that the nano-elements are nanowires.

3. (original) An optical diffraction element as claimed in claim 1, characterized in that the nano-elements are nanotubes.

4.(original) An optical diffraction element as claimed in claim 3, characterized in that the nanotubes are carbon nanotubes.

5.(original) An optical diffraction element as claimed in claim 4, characterized in that the nanotubes are single-wall nanotubes.

6. An optical diffraction element as claimed in any one of claims 1 to 5, characterized in that it is a transmission element.

7. (currently amended) An optical diffraction element as claimed in claim 1 ~~any one of claims 1 to 5~~, characterized in that it is a reflective element.

8.(currently amended) An optical diffraction element as claimed in claim 3 ~~any one of claims 3 to 7~~, characterized in that the

material of the diffraction layer is essentially solid at temperatures below 30° C.

9. (currently amended) An optical diffraction element as claimed in claim 3 ~~any one of claims 3 to 8~~, characterized in that the material of the diffraction layer is liquefiable at temperatures below the temperature at which the nano-element tubes get destroyed.

10. (currently amended) An optical diffraction element as claimed in claim 3 ~~any one of claims 3 to 9~~, characterized in that the material of the diffraction layer is selected from the group consisting of glasses with melting or glass temperatures below 800° C, acrylic thermoplastics, and paraffins.

11. (currently amended) An optical diffraction element as claimed in claim 1 ~~any one of claims 1 to 10~~, characterized in that it is shaped as and acts as a linear diffraction grating, and in that the diffraction strips are straight grating strips.

12. (currently amended) An optical diffraction element as claimed in claim 1 ~~any one of claims 1 to 10~~, characterized in that it is shaped as and acts as a two-dimensional diffraction grating, and in that it comprises two sets of straight diffraction strips, the strips of the first set being perpendicular to the strips of the second set.

13. (currently amended) An optical diffraction elements as claimed in claim 1 ~~any one of claims 1 to 10~~, characterized in that it is shaped as and acts as a Fresnel lens, and in that the diffraction strips are annular strips.

14. (currently amended) A method of manufacturing the optical diffraction element as claimed in claim 1 ~~any one of claims 1 to 13~~, characterized by the steps of:- printing a pattern of strips comprising a solution containing nano-element tubes;

- aligning the nano-element tubes in a required direction by means of an electric or magnetic aligning field; and
- fixing the orientation of the nano-element tubes in said direction by treating the solution in the presence of the aligning field.

15.(original) A method as claimed in claim 14, characterized in that treating the solution comprises evaporating the solution.

16. (original) A method as claimed in claim 14, characterized in that treating the solution comprises polymerizing the solution.

17. (currently amended) A method of manufacturing the diffraction element as claimed in claim 1 ~~any one of claims 1 to 13~~, characterized by the steps of:

- spin-coating a surface area of a substrate with a thin film of a solution containing nano-element tubes;
- aligning the nano-element tubes in a required direction by means of an electric or magnetic aligning field;
- fixing the orientation of the nano-element tubes in said direction by treating the solution in the presence of the aligning field; and
- baking out strip-shaped areas of the film so as to obtain a pattern of strips comprising aligned nano-element tubes, which strips form the diffraction strips.

18.(original) A method as claimed in claim 17, characterized in that the step of baking out
is performed by exposing the solution to radiation of sufficient energy via a mask having a pattern of transparent and non-transparent strips corresponding to the element pattern such that a pattern, of strips comprising aligned nano-elements tubes remains, which strips form the diffraction strips.

19.(original) A method as claimed in claim 17, characterized in that the step of baking out
is performed by scanning a sufficiently intense radiation beam strip-wise across the solution, such that a pattern of strips comprising aligned nano-elements remains, which strips form the diffraction strips.

20. (currently amended) A method of manufacturing the diffraction element as claimed in claim 1 ~~any one of claims 1 to 13~~, characterized by the steps of:

- coating a substrate area with a layer of self-assembled material;
- strip-wise modifying the material of the layer so that a pattern of strips, which wet to the substrate surface, is obtained, and removing the rest of the layer material;
- spin-coating a liquid containing nano-elements over the pattern thus obtained, whereby the liquid wets only the bare substrate so that a pattern of liquid strips containing nano-elements is obtained;
- aligning the nano-elements in the liquid strips in a required direction by means of an electric or magnetic aligning field; and
- fixing the orientation of the nano-elements in said

direction by treating the liquid in the presence of the aligning field, thereby obtaining a pattern of strips containing aligned nano-elements, which form the diffraction strips.

21.(original) A method as claimed in claim 20, characterized in that the step of modifying the material of the layer comprises scanning the layer strip-wise by a beam of radiation.

22. (original) A method as claimed in claim 20, characterized in that the step of modifying
the material of the layer comprises illuminating the layer via a mask having a pattern of transparent slits corresponding to the strip pattern of the element.

23.(currently amended) A method of manufacturing the diffraction grating as claimed in claim 1 ~~any one of claims 1 to 13~~, characterized by a process of catalytic growing of nano-elements on a substrate surface from a layer deposited on the substrate and comprising nano-element material, and of baking out strip-shaped areas of the layer so as to obtain a pattern of strips comprising aligned nano-elements, which strips form the element strips.

24. (currently amended) An optical record carrier comprising at least one information layer in which information is encoded in information areas which alternate with intermediate areas, characterized in that the information is covered by a diffraction grating as claimed in claim 1 ~~any one of claims 1 to 11~~.

25.(currently amended) A device for reading and recording an optical information carrier of a first type having a first

information density and an optical information carrier of a second type having a second information density, which device comprises a radiation source unit supplying a first radiation beam having a first wavelength for cooperating with the first type of information carrier and a second radiation beam having a second wavelength for coöperating with the second type of record carrier, and an objective system for focusing the first and the second beam on an information layer of the first and the second type of record carrier, respectively, characterized in that a diffraction grating as claimed in claim 1 ~~any one of claims 1 to 11~~ is arranged between the radiation source unit and the objective system in the common radiation path of the first and the second radiation beam, and in that one of the radiation beams has a first polarization direction parallel to the direction of the nano-elements in the grating, whilst the other beam has a polarization direction perpendicular to the first polarization direction.